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| BELL, BOYD & LLOYD, LLP | | | EXAMINER | |
| P.O. BOX 1135 | | | TORRES, JOSEPH D | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/523,509

Applicant(s)

MARKE ET AL.

Examiner

Joseph D. Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) 36-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 02/04/2005, 08/15/2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, claims 20- 35, in the reply filed on 10/10/2007 is acknowledged.

Claims 36-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/10/2007.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: '5'. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: claim 1 recites, "**a reliability measure** concerning at least one of a quality of cellular radio transmission, demodulation and decoding of the data **is calculated** by the Cellular Text Telephone Modem receiver **from a sound quality of a channel decoder**" [Emphasis added]. MPEP 608.01(o) requires that language used in the claims must be in the specification so that undue experimentation in deciphering the meaning of the claims is not required.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 33 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 33 recites, "**a reliability measure** concerning at least one of a quality of cellular radio transmission, demodulation and decoding of the data **is calculated** by the Cellular

Text Telephone Modem receiver **from a sound quality of a channel decoder**

[Emphasis added], which is not taught anywhere in the specification.

Claim 33 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis for the language in claim 33 in the specification. MPEP 608.01(o) requires that language used in the claims must be in the specification so that undue experimentation in deciphering the meaning of the claims is not required.

Claim Rejections - 35 USC § 102/103 (In re Best)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 20, 23-27, 31, 32 and 35 are rejected under 35 U.S.C. 102(e)/103(a) as being anticipated by Dorbecker; Matthias et al. (US 6611804 B1, hereafter referred to as Dorbecker) [with Higley; Paul D., US 5224105 A, as a teaching reference on FEC decoding operations] unpatentable over Dorbecker; Matthias et al. (US 6611804 B1, hereafter referred to as Dorbecker) in view of Higley; Paul D. (US 5224105 A).

Note: Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." In re Best, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

Note: Dorbecker teaches a Prior Art FEC device for handling potential errors, but does not the internal workings of the FEC device since FEC devices are so notoriously well-known in the art. Higley explicitly teaches a typical Prior Art FEC device.

35 U.S.C. 102(e)/103(a) rejection of claim 20.

Dorbecker teaches exchanging, between a communications terminal receiver and a Cellular Text Telephone Modem receiver at least one piece of additional information concerning a reliability of correct reception of the data (SPD 210 in Figure 3 is a communications terminal receiver; LRD Decoder 310 and TTY 225 are substantially a Cellular Text Telephone Modem since LRD Decoder 310 and TTY 225 are configured for detecting, demodulating and decoding Text included in a Cellular speech signal; col. 4, lines 10 in Dorbecker teaches that TTY transmitted text data includes FEC redundancy, which is additional information concerning a reliability of correct reception of the data, that is, Dorbecker teaches exchanging, between the SPD communications terminal receiver 210 and a Cellular TTY Text Telephone Modem receiver comprising LRD Decoder 310 and TTY 225 at least one piece of additional FEC redundant information concerning a reliability of correct reception of the data since the SPD communications terminal receiver 210 forwards TTY text including FEC redundancy to the Cellular TTY Text Telephone Modem receiver comprising LRD Decoder 310 and TTY 225); and modifying an error handling of received data, based on the exchanged information, in one of the communication terminal receiver and the Cellular Text Telephone Modem receiver (col. 11, lines 50-66 in the teaching reference Higley teaches that if syndrome are zero then the received data is assumed correct and passed through as output data 162 in Figure 9 of Higley otherwise XOR circuit 216 inverts and corrects incorrect data bits, that is, col. 11, lines 50-66 in Higley teaches XOR circuit 216 for modifying an error handling of received data, based on syndrome

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values generated from the exchanged redundancy information provided to the Cellular Text Telephone Modem receiver).

Note: it would also be obvious to combine Higley with Dorbecker since Higley teaches an important component, FEC, required by Dorbecker.

35 U.S.C. 102(e)/103(a) rejection of claim 23.

Col. 11, lines 50-66 in the teaching reference Higley teaches that if syndrome are zero then the received data is assumed correct and passed through as output data 162 in Figure 9 of Higley otherwise XOR circuit 216 inverts and corrects incorrect data bits, that is, col. 11, lines 50-66 in Higley teaches XOR circuit 216 for modifying an error handling of received data, based on syndrome values generated from the exchanged redundancy information provided to the Cellular Text Telephone Modem receiver.

35 U.S.C. 102(e)/103(a) rejection of claim 24.

See Title in Dorbecker.

35 U.S.C. 102(e)/103(a) rejection of claim 25.

SPD 210 in Figure 3 in Dorbecker is a communications terminal receiver in the cellular radio terminal 210, 310 and 225 of Figure 3.

35 U.S.C. 102(e)/103(a) rejection of claim 26.

Figure 1 in Dorbecker teaches that as TTY text transmission has a stop bit to indicate the termination of a TTY text transmission embedded in voice transmissions.

35 U.S.C. 102(e)/103(a) rejection of claim 27.

MUX 425 in Figure 4 in Dorbecker provides an adaptive data rate for TTY text transmission embedded in voice transmissions the data rate determined by the amount to TTY embedded in a block of length B of speech.

35 U.S.C. 102(e)/103(a) rejection of claims 31 and 32.

Col. 11, lines 50-66 in the teaching reference Higley teaches that if syndrome are zero then the received data is assumed correct and passed through as output data 162 in Figure 9 of Higley otherwise XOR circuit 216 inverts and corrects incorrect data bits, that is, col. 11, lines 50-66 in Higley teaches XOR circuit 216 for modifying an error handling of received data, based on syndrome values generated from the exchanged redundancy information provided to the Cellular Text Telephone Modem receiver. Positions in the data frame for redundancy are unused TTY text positions.

35 U.S.C. 102(e)/103(a) rejection of claim 35.

Abstract in Dorbecker.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being anticipated by Dorbecker; Matthias et al. (US 6611804 B1, hereafter referred to as Dorbecker) [with

Higley; Paul D., US 5224105 A, as a teaching reference on FEC decoding operations] unpatentable over Dorbecker; Matthias et al. (US 6611804 B1, hereafter referred to as Dorbecker) in view of Higley; Paul D. (US 5224105 A) In further view of Raychaudhuri; Dipankar et al. (US 5122875 A, hereafter referred to as Raychaudhuri).

35 U.S.C. 103(a) rejection of claim 21.

Dorbecker and Raychaudhuri substantially teaches the claimed invention described in claim 20 (as rejected above).

However Dorbecker and Raychaudhuri does not explicitly teach the specific use of suppressing error concealment in a voice decoder of the communication terminal receiver.

Raychaudhuri, in an analogous art, teaches suppressing an error concealment in a voice decoder of the communication terminal receiver (col. 15, lines 35-50 in

Raychaudhuri teach that only if FEC is unable to correct all errors in a data block are not corrected is concealment performed on flagged uncorrectable data, hence; FEC in Raychaudhuri is used to suppress error concealment by correcting correctable errors and only subjecting uncorrectable data blocks to error concealment).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dorbecker and Raychaudhuri with the teachings of Raychaudhuri by including suppressing an error concealment in a voice decoder of the communication terminal receiver. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill

in the art would have recognized that suppressing an error concealment in a voice decoder of the communication terminal receiver would have provided error concealment in the event of an uncorrectable error (col. 6, lines 22-36 in Raychaudhuri).

35 U.S.C. 103(a) rejection of claim 22.

Col. 6, lines 24-27 in Dorbecker teach Cellular Text Telephone Modem text/voice indicator, which indicates that the data is Cellular Text Telephone Modem text data, is sent to the voice decoder of the communication terminal receiver. Col. 15, lines 35-50 in Raychaudhuri teach that only if FEC is unable to correct all errors in a data block are not corrected is concealment performed on flagged uncorrectable data, hence; FEC in Raychaudhuri is used to suppress error concealment by correcting correctable errors and only subjecting uncorrectable data blocks to error concealment.

Claims 28-30, 33 and 34 are rejected under 35 U.S.C. 103(a) as being anticipated by Dorbecker; Matthias et al. (US 6611804 B1, hereafter referred to as Dorbecker) [with Higley; Paul D., US 5224105 A, as a teaching reference on FEC decoding operations] unpatentable over Dorbecker; Matthias et al. (US 6611804 B1, hereafter referred to as Dorbecker) in view of Higley; Paul D. (US 5224105 A) In further view of Kobayashi; Hisashi et al. (US 6029264 A, hereafter referred to as Kobayashi).

35 U.S.C. 103(a) rejection of claims 28 and 29.

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Dorbecker and Raychaudhuri substantially teaches the claimed invention described in claim 20 (as rejected above).

However Dorbecker and Raychaudhuri do not explicitly teach the specific use of additional information is added by the communication terminal receiver to the received data.

Kobayashi, in an analogous art, teaches additional information is added by the communication terminal receiver to the received data (Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dorbecker and Raychaudhuri with the teachings of Kobayashi by including additional information is added by the communication terminal receiver to the received data. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that additional information is added by the communication terminal receiver to the received data would have provided Improved error correction performance (col. 4, lines 22-25 in Kobayashi).

35 U.S.C. 103(a) rejection of claim 30.

Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders. Erasures indicate that the frame having an erasure is corrupted.

35 U.S.C. 103(a) rejection of claim 33 and 34.

Figure 8 in Kobayashi teaches an AZD device for initially receiving data and adding soft erasure information for supplementing downstream error correction decoders. Erasures are an indication of noise in the communication channel.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 20-35 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 14-24 of copending Application No. 10/523326. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claims 20-35 are provisionally rejected on the ground of nonstatutory double patenting over claims 14-24 of copending Application No. 10/523326. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: claims 20-35 are a broader version of claims 14-24 of copending Application No. 10/523326; hence are embed in 14-24 of copending Application No. 10/523326.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571) 272-6962. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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